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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/841,486

04/25/2001

Yasuo Iwasa

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65565

7590

06/29/2010

SUGHRUE-265550

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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1787

NOTIFICATION DATE

DELIVERY MODE

06/29/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 09/841,486	<b>Applicant(s)</b> IWASA ET AL.	
	<b>Examiner</b> Hai Vo	<b>Art Unit</b> 1787	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11 and 13-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1787

1. The art rejections and double patenting rejections over WO 0022033 have been overcome in view of the present amendment and the declaration filed on April 16, 2010. The declaration has successfully demonstrated that the porous film of WO '033 does not meet the liquid absorbing capacity in the range set forth in the claim. As the crew shear rate of  $300 \text{ sec}^{-1}$  is critical or essential to the determination of the liquid absorbing capacity from 3 to  $2600 \text{ ml/m}^2$  and WO '033 fails to teach the crew shear rate of  $300 \text{ sec}^{-1}$ , there is no basis for the liquid absorbing capacity which is inherently present in WO '033. New grounds of rejections are made in view of WO 0140361 and WO 0142341.
2. Other double patenting rejections are maintained.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8-11 and 13-21 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by WO

Art Unit: 1787

0140361. US 6,984,423 to Iida et al. will be relied on as an equivalent form of WO 0140361 for convenience. Iida teaches each and every limitation of the claimed subject matter except the number of pores on the surface of the porous film (abstract, tables 1-3). However, it appears that the porous resin film of Iida is structurally the same as the porous film of the instant invention. The porous film comprises from 30 to 90wt% of a thermoplastic resin and from 10 to 70 wt% of a fine inorganic powder. The thermoplastic resin is a blend of a polyolefin resin and a hydrophilic thermoplastic resin. The hydrophilic thermoplastic resin has a water absorption capacity within the claimed range. The porous film has a contact angle, porosity and liquid absorption capacity within the claimed ranges (claim 1, table 1). The fine inorganic powder has an average particle size within the claimed range. The article includes a base layer and a colorant layer. Therefore, it is the examiner's position that the number of pores on the film surface would be inherently present as like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Iida does not specifically disclose a screw shear rate of  $300 \text{ sec}^{-1}$  at which the composition was kneaded in an intermeshing twin-screw extruder. However, the screw shear rate plays a key role in determination of the liquid absorbing capacity of the porous film in view of Applicants' disclosure. Since Iida contemplates the liquid absorbing capacity in the range instantly claimed, it is the

Art Unit: 1787

examiner's position that the screw shear rate must be inherently present.

Accordingly, Iida anticipates or strongly suggests the claimed subject matter.

6. Claims 1-6, 8-11 and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0142341 in view of WO 0022033. US 6,811,837 (hereafter Iwasa I) and US 6,911,253 (Iwasa II) will be relied upon as an equivalent form of WO 0142341 and WO 0022033 respectively. Iwasa I teaches each and every limitation of the claimed invention except for the hydrophilic thermoplastic resin (abstract, table 1, column 3, lines 34-36). Iwasa II, however, teaches a porous resin film comprising a resin composition similar to that of the porous resin film of the claimed invention, i.e., 38 wt% of polypropylene, 12 wt% of a hydrophilic thermoplastic resin and 50 wt % of an inorganic fine powder (example 1; table 1; and column 11, lines 20-35). The porous film has an average contact angle, a porosity within the claimed ranges (table 1). The hydrophilic thermoplastic resin is an alkylene oxide polymer (example 1). The alkylene oxide polymer is a reaction product of an alkylene oxide compound and a dicarboxylic acid compound. The inorganic fine powder has an average grain size of 0.1 to 10 microns (column 8, lines 14-15). The thermoplastic resin polymer is capable of dissolving in water or absorbing of 5 g/g or more of water in 30 mins (column 3, lines 64-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the hydrophilic thermoplastic polymer as taught by Iwasa II into the resin composition

Art Unit: 1787

motivated by the desire to ensure a desirable ink absorption in the printing process and thus improving uniformity in the absorption.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-6, 8-11 and 13-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. US 6,811,837 (hereafter Iwasa I) in view of US 6,911,253 (Iwasa II). The claims of Iwasa I teach each and every limitation of the claimed invention except the hydrophilic thermoplastic resin. Iwasa II, however, teaches a porous resin film comprising a resin composition similar to that of the porous resin film of the claimed invention, i.e., 38 wt% of polypropylene, 12 wt% of a hydrophilic

Art Unit: 1787

thermoplastic resin and 50 wt % of an inorganic fine powder (example 1; table 1; and column 11, lines 20-35). The porous film has an average contact angle, a porosity within the claimed ranges (table 1). The hydrophilic thermoplastic resin is an alkylene oxide polymer (example 1). The alkylene oxide polymer is a reaction product of an alkylene oxide compound and a dicarboxylic acid compound. The inorganic fine powder has an average grain size of 0.1 to 10 microns (column 8, lines 14-15). The thermoplastic resin polymer is capable of dissolving in water or absorbing of 5 g/g or more of water in 30 mins (column 3, lines 64-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the hydrophilic thermoplastic polymer as taught by Iwasa II into the resin composition motivated by the desire to ensure a desirable ink absorption in the printing process and thus improving uniformity in the absorption.

9. Claims 1-6, 8-11, and 13-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,984,423. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '423 patent teach each and every limitation of the claimed subject matter except the number of pores on the surface of the porous film. However, it appears that the porous resin film of the '423 patent is structurally the same as the porous film of the instant invention. The porous film comprises from 30 to 90wt% of a thermoplastic resin and from 10 to 70 wt% of a fine inorganic powder. The thermoplastic resin

Art Unit: 1787

is a blend of a polyolefin resin and a hydrophilic thermoplastic resin. The hydrophilic thermoplastic resin has a water absorption capacity within the claimed range. The porous film has a contact angle, porosity and liquid absorption capacity within the claimed ranges (claim 1, table 1). The fine inorganic powder has an average particle size within the claimed range. The article includes a base layer and a colorant layer. Therefore, it is the examiner's position that the number of pores on the film surface would be inherently present as like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Iida does not specifically disclose a screw shear rate of  $300 \text{ sec}^{-1}$  at which the composition was kneaded in an intermeshing twin-screw extruder. However, the screw shear rate is critical or essential to the determination of the liquid absorbing capacity of the porous film in view of Applicants' disclosure. Since Iida contemplates the liquid absorbing capacity in the range instantly claimed, it is the examiner's position that the screw shear rate must be inherently present.

10. The double patenting rejections have been maintained for the following reasons.

Applicants contend that none of these patents teach or suggest a liquid absorbing capacity set out in the claims. The examiner respectfully disagrees. The US 6,811,837 patent has the liquid absorbing capacity in the range as recited by the claim (claim 1, column 3, lines 35-37). The US 6,984,423 patent



contemplates the liquid absorbing capacity in the range instantly claimed (claim 1, table 1).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The

Art Unit: 1787

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/  
Primary Examiner, Art Unit 1787